

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A plasma display, comprising:

a plasma display panel, which includes:

first and second substrates arranged to face ~~with~~ each other;

scanning electrodes and common electrodes alternately provided with each other

on a side of said first substrate facing said second substrate and extending

in a first direction; and

data electrodes provided on a side of said second substrate facing said first

substrate and extending in a second direction across said first direction;

data drivers which apply data pulse to said data electrodes;

a control circuit which controls operation of said data drivers based on a video signal; and

a protection signal output circuit which outputs a first protection signal to said control

circuit when a sum of currents supplied from said data drivers to said data electrodes within a

time ~~span equal to one sub-field or more to less than one frame~~ exceeds a previously set first

specified current value, wherein said first protection signal ~~restraining~~ restrains the operation of said data drivers;

wherein said time span is greater than or equal to one sub-field; and

wherein said time span is less than one frame.

2. (currently amended): The plasma display according to claim 1, wherein said protection signal output circuit judges whether or not a current supplied from at least one data driver among said data drivers to said data electrode has exceeded a previously set second specified current value, and outputs a second protection signal to said control circuit when the current supplied to said at least one data driver has exceeded said second specified current value, and wherein said second protection signal ~~restraining~~restrains the operation of said at least one data driver.

3. (currently amended): A plasma display, comprising:

a plasma display panel, which includes:

first and second substrates arranged to face ~~with~~ each other;

scanning electrodes and common electrodes alternately provided with each other

on a side of said first substrate facing said second substrate and extending

in a first direction; and

data electrodes provided on a side of said second substrate facing said first

substrate and extending in a second direction across said first direction;

data drivers which apply data pulse to said data electrodes;

a control circuit which controls operation of said data drivers based on a video signal; and

a protection signal output circuit;

wherein said protection signal output circuit outputs a first protection signal when a current from at least one data driver among said data drivers to said data electrode has exceeded a previously set first specified current value; and

wherein said protection signal output circuit ~~which~~ judges whether or not a current supplied from at least one data driver among said data drivers to said data electrode has exceeded a previously set second specified current value, and outputs a second protection signal to said control circuit when the current supplied to said at least one data driver has exceeded said second specified current value, and wherein said second protection signal ~~restraining~~ restrains the operation of said at least one data driver.

4. (original): The plasma display according to claim 2, wherein said protection signal output circuit starts said judgment when a temperature around said data drivers exceeds a previously set specified temperature.

5. (original): The plasma display according to claim 3, wherein said protection signal output circuit starts said judgment when a temperature around said data drivers exceeds a previously set specified temperature.

6. (original): The plasma display according to claim 1, wherein said control circuit sequentially deletes sub-fields from a least significant bit among sub-fields which compose one frame with an input of said first protection signal as a trigger.

7. (original): The plasma display according to claim 3, wherein said control circuit sequentially deletes sub-fields from a least significant bit among sub-fields which compose one frame with an input of said second protection signal as a trigger.

8. (original): The plasma display according to claim 1, wherein said control circuit allows said data drivers to apply equal data pulses to adjacent two scanning electrodes among said scanning electrodes with an input of said first protection signal as a trigger.

9. (original): The plasma display according to claim 3, wherein said control circuit allows said data drivers to apply equal data pulses to adjacent two scanning electrodes among said scanning electrodes with an input of said second protection signal as a trigger.

10. (currently amended): The plasma display according to claim 1, wherein said protection signal output circuit ~~is composed of~~comprises a microcomputer.

11. (currently amended): The plasma display according to claim 3, wherein said protection signal output circuit ~~is composed of~~comprises a microcomputer.

12. (currently amended): A ~~driving~~ method of driving a plasma display, comprising the step of:

restraining an operation of data drivers when a sum of currents supplied from said data drivers to data electrodes within a time span equal to one sub-field or more to less than one frame exceeds a previously set first specified current value;

wherein said time span is greater than or equal to one sub-field; and

wherein said time span is less than one frame.

13. (currently amended): The ~~driving~~-method of driving a plasma display according to claim 12, further comprising ~~the steps of~~:

judging whether or not a current supplied from at least one data driver among said data drivers to said data electrodes has exceeded a second specified current value; and

restraining, the operation of said at least one data driver when the current supplied to said at least one data driver exceeds said second specified current value, ~~the operation of said one data driver.~~

14. (currently amended): A ~~driving~~-method of driving a plasma display, comprising ~~the steps of~~:

determining whether or not a current supplied from at least one data driver among data drivers to data electrodes has exceeded a first specified current value;

judging whether or not a current supplied from at least one data driver among data drivers to data electrodes has exceeded a second specified current value; and

restraining, the operation of said at least one data driver when the current supplied to said at least one data driver exceeds said second specified current value, ~~the operation of said one data driver.~~

15. (currently amended): The ~~driving~~-method of driving a plasma display according to claim 13, wherein said judgment starts when a temperature around said data drivers exceeds a previously set specified temperature.

16. (currently amended): The ~~driving~~-method of driving a plasma display according to claim 14, wherein said judgment starts when a temperature around said data drivers exceeds a previously set specified temperature.

17. (currently amended): The ~~driving~~-method of driving a plasma display according to claim 12, wherein said restraining the operation of said drivers further comprises ~~the step of~~ deleting sub-fields sequentially from a least significant bit among sub-fields that compose one frame.

18. (currently amended): The ~~driving~~-method of driving a plasma display according to claim 14, wherein said restraining the operation of said drivers further comprises ~~the step of~~ deleting sub-fields sequentially from a least significant bit among sub-fields that compose one frame.

19. (currently amended): The ~~driving~~ method of driving a plasma display according to claim 12, wherein said restraining the operation of said one data driver further comprises ~~the step of~~ applying equal data pulses to adjacent two scanning electrodes.

20. (currently amended): The ~~driving~~ method of driving a plasma display according to claim 14, wherein said restraining the operation of said one data driver further comprises ~~the step of~~ applying equal data pulses to adjacent two scanning electrodes.

21. (new): A plasma display, comprising:

a plasma display panel, which includes:

first and second substrates arranged to face each other;

scanning electrodes and common electrodes alternately provided with each other

on a side of said first substrate facing said second substrate and extending

in a first direction; and

data electrodes provided on a side of said second substrate facing said first

substrate and extending in a second direction across said first direction;

data drivers which apply data pulse to said data electrodes;

a control circuit which controls operation of said data drivers based on a video signal; and

a protection signal output circuit which outputs a first protection signal to said control

circuit when said protection signal output circuit judges that a current supplied from at least one

data driver among said data drivers to said data electrodes within a time span exceeds a

previously set first specified current value, wherein said first protection signal restrains the operation of said at least one data driver;

wherein said time span is greater than or equal to one sub-field; and

wherein said time span is less than one frame.

22. (new): The plasma display according to claim 21, wherein said protection signal output circuit judges whether or not a current supplied from at least one data driver among said data drivers to said data electrode has exceeded a previously set second specified current value, and outputs a second protection signal to said control circuit when the current supplied to said at least one data driver has exceeded said second specified current value, and wherein said second protection signal restrains the operation of said at least one data driver.

23. (new): The plasma display according to claim 21, wherein said protection signal output circuit starts said first judgment when a temperature around said data drivers exceeds a previously set specified temperature.

24. (new): The plasma display according to claim 21, wherein said control circuit sequentially deletes sub-fields from a least significant bit among sub-fields which compose one frame with an input of said first protection signal as a trigger.

25. (new): The plasma display according to claim 21, wherein said control circuit allows said data drivers to apply equal data pulses to adjacent two scanning electrodes among said scanning electrodes with an input of said first protection signal as a trigger.

26. (new): The plasma display according to claim 21, wherein said protection signal output circuit comprises a microcomputer.

27. (new): A method of driving a plasma display, comprising:
restraining an operation of at least one data driver when it is judged that a current supplied from said at least one data driver to data electrodes within a time span exceeds a previously set first specified current value;

wherein said time span is greater than or equal to one sub-field; and

wherein said time span is less than one frame.

28. (new): The method of driving a plasma display according to claim 27, further comprising:

judging whether or not a current supplied from at least one data driver among said data drivers to said data electrodes has exceeded a second specified current value; and

restraining the operation of said at least one data driver when the current supplied to said at least one data driver exceeds said second specified current value.

29. (new): The method of driving a plasma display according to claim 27, wherein said first judgment starts when a temperature around said data drivers exceeds a previously set specified temperature.

30. (new): The method of driving a plasma display according to claim 27, wherein said restraining the operation of said drivers further comprises deleting sub-fields sequentially from a least significant bit among sub-fields that compose one frame.

31. (new): The method of driving a plasma display according to claim 27, wherein said restraining the operation of said one data driver further comprises applying equal data pulses to adjacent two scanning electrodes.